Please amend claim 31 to read as follows:

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31. (Once amended) A method of producing a recombinant porcine adenovirus vector for use as a vaccine including inserting into a non-essential region of a porcine adenovirus genome, a heterologous nucleotide sequence in association with an effective promoter sequence to form a recombinant adenovirus vector greater than 105% the size of wild-type adenovirus.

Please amend claim 39 to read as follows:

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39. (Once amended) A method of vaccination of pigs against disease including administering to said pigs a first recombinant porcine adenovirus vector stably incorporating, and capable of expression of a heterologous nucleotide sequence encoding an antigenic determinant of said disease against which vaccination is desired, said adenovirus vector having a size greater than 105% the size of wild-type adenovirus.

In addition, please add new claims 43 to 62 as follows:

Sub-FI

A recombinant vector as claimed in claim 2 wherein said recombinant porcine adenovirus is capable of expression of a heterologous nucleotide sequence.

A recombinant vector as claimed in claim 43 wherein said heterologous nucleotide sequence is capable of expression as an antigenic polypeptide.

45.

- A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence is capable of expression as an incrumo-potentiating molecule.
- 46. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes antigenic determinants of infectious agents causing intestinal diseases in pigs.

- 47. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes antigenic determinants of infectious agents causing respiratory diseases in pigs.
- 48. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of pseudorabies virus (Aujeszky's disease virus).

A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of glycoprotein D of pseudorabies virus.

- A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of porcine respiratory and reproductive syndrome virus (PRRSV).
- 51. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of Hog cholera virus.
- 52. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of porcine parvovirus.
- 53. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of porcine coronavirus.
- A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of porcine rotavirus.
- A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of porcine parainfluenza virus.
- 56. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes an antigenic determinant of *Mycoplasma hyopneumonia*.

- 57. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes FLT-3 ligand.
- A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes interleukin-3 (IL-3).
- 59. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes porcine interleukin-4 (IL-4).
- 60. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes gamma interferon.
- 61. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes porcine granulocyte macrop¹...ge colony stimulating factor (GM-CSF).
- 62. A recombinant vector as claimed in claim 44 wherein said heterologous nucleotide sequence encodes porcine granulocyte colony stimulating factor (G-CSF).--

REMARKS

In the Office Action mailed January 30, 2002, claims 3, 5-24, and 33-38 were withdrawn from consideration. Claims 1, 2, 4, 25-32 and 39-42 are under consideration in the instant action. Claims 31, 32, and 39-42 were rejected under 35 USC 112, second paragraph. Claims 1, 2, 4, 25-32 and 39-42 were rejected under 35 USC 103(a). Further, the drawings were objected to under 37 CFR 1.84(i) and 37 CFR 1.84(p).

The amendments and remarks as presented here are believed to place the case in condition for allowance. Accordingly, entry of these amendments, reconsideration of the Examiner's rejections and objections and passage to allowance is respectfully requested. With this response claims 1, 2, 4, 25-32, 39-42 and 43-62 are pending herein.